SUMMARY

A device is made available for producing monocrystals, for example large-diameter gallium arsenide monocrystals, that has a cylindrical heating appliance with a floor heater (2) and a cover heater (3). The heating surfaces of the floor and the cover heater are considerably larger than the cross-sectional area of the monocrystal to be produced. In addition, an insulator (6) is planned for the reaction space that is designed to prevent a radial heat flow and the guarantee a strictly axial heat flow over the complete height of the reaction space between the cover heater (3) and the floor heater (2).

(Fig. 1)